

## M12 female 90° A-cod. with cable shielded

PUR 5x0.34 shielded bk UL/CSA+drag ch. 3m

Female 90° M12, 5-pole shielded

with cable sleeves

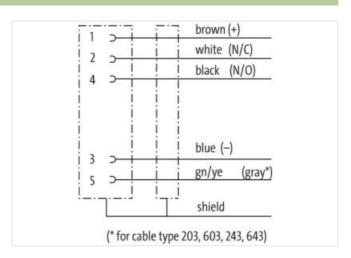
Plastic housings with good resistance against chemicals and oils.

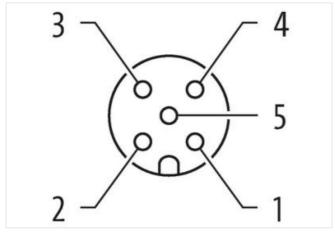
The resistance to aggressive media should be individually tested for your application. Further details on request. Further cable lengths on request.

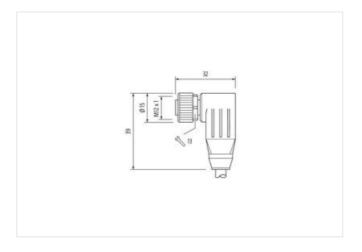
## **Link to Product**

## Illustration









Product may differ from Image













Cable length

3 m

Side 1

Tightening torque

0,6 Nm

The information in this Product-PDF has been compiled with the utmost care.

Liability for the correctness completeness and topicality of the information is restricted to gross negligence. Version: 2024-04-27



Mounting method	inserted, screwed
Coating contact	gold plated
Family construction form	M12
Thread	M12 x 1
Coding	A
Material contact	Copper alloy
Material	PUR
No. of poles	5
Width across flats	SW13
Degree of protection (EN IEC 60529)	IP65, IP66K, IP67
Side 2	
Stripping length (jacket)	20 mm
Coating contact	gold plated
Commercial data	
ECLASS-6.0	27279218
ECLASS-7.0	27279218
ECLASS-8.0	27279218
ECLASS-9.0	27060311
ECLASS-10.1	27060311
ECLASS-10.1	27060311
ECLASS-12.0	27060311
ETIM-5.0	EC001855
customs tariff number	85444290
GTIN	4048879475716
Packaging unit	1
	'
Electrical data   Supply	
Operating voltage AC max.	60 V
Operating voltage DC max.	60 V
Operating voltage AC (UL-listed)	30 V
Operating voltage DC (UL-listed)	30 V
Current operating per contact max.	4 A
Diagnostics	
Status indication LED	no
Installation   Connection	
Stripping length (jacket)	20 mm
Mounting set	M12 x 1
Device protection   Electrical	
	inserted envisued
Additional condition protection degree	inserted, screwed
Pollution Degree  Rated surge voltage	3 1,5 kV
Material group (IEC 60664-1)	1,5 KV
	'
Mechanical data	
Contour for corrugated hose	without
Mechanical data   Material data	
Coating locking	Nickeled
Coating of fitting	nickel plated
Material gasket	FKM
Locking material	Zinc die-casting
Material screw connection	Zinc die-casting
Mechanical data   Mounting data	
and   and and a	



stay connected

Mounting method	inserted, screwed, Shaking protection
Environmental characteristics   Climatic	
Operating temperature min.	-25 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality
Conformity	The same density
	DIN EN 04070 0 404 (M40)
Product standard	DIN EN 61076-2-101 (M12)
Installation   Cable	
Cable identification	643
Cable Type	3
Jacket Color	black
Type of Certificate	cURus
Amount stranding	1
Stranding	5 wires around Core filler twisted
Cable shielding (type)	copper braid, tinned
Cable shielding (coverage)	80 %
Banding	Fleece, Foil
Filler	yes
wire arrangement	brown, black, blue, white, gray
No. of bending cycles (C-track)	5 Mio. @ 25 °C
Cable weigth	57,2 g/m
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A
Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer-diameter (jacket)	5,6 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	PP
Amount wires	5
Outer diameter insulation	1,25 mm
Outer diameter insulation Outer diameter tolerance core insulation	1,25 mm ± 5 %
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Outer diameter tolerance core insulation	± 5 %
Outer diameter tolerance core insulation  Shore hardness wire insulation	± 5 % 70 ± 5 Shore D
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm
Outer diameter tolerance core insulation  Shore hardness wire insulation Ingredient freeness wire insulation Amount strands (wire) Diameter of single wires Conductor crosssection (wire)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare
Outer diameter tolerance core insulation  Shore hardness wire insulation Ingredient freeness wire insulation  Amount strands (wire) Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4
Outer diameter tolerance core insulation  Shore hardness wire insulation Ingredient freeness wire insulation  Amount strands (wire) Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A
Outer diameter tolerance core insulation  Shore hardness wire insulation Ingredient freeness wire insulation  Amount strands (wire) Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare strand class 6  5 m @ 25 °C   horizontal to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.  AC withstand voltage power (wire - shield)  Power frequency withstand voltage power	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C  300 V  2 kV @ 60 s
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.  AC withstand voltage power (wire - shield)  Power frequency withstand voltage power (wire - jacket)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare strand class 6  5 m @ 25 °C   horizontal to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C  300 V  2 kV @ 60 s
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.  AC withstand voltage power (wire - shield)  Power frequency withstand voltage power (wire - jacket)  AC withstand voltage power (wire - wire)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C  300 V  2 kV @ 60 s  2 kV @ 60 s
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.  AC withstand voltage power (wire - shield)  Power frequency withstand voltage power (wire - jacket)  AC withstand voltage power (wire - wire)  Min. operating temperature (static)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C  300 V  2 kV @ 60 s  2 kV @ 60 s  -40 °C
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.  AC withstand voltage power (wire - shield)  Power frequency withstand voltage power (wire - jacket)  AC withstand voltage power (wire - wire)  Min. operating temperature (static)  Max. operating temperature (fixed)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C  300 V  2 kV @ 60 s  2 kV @ 60 s  2 kV @ 60 s  -40 °C  80 °C / 90 °C @ 10000 h Operation
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.  AC withstand voltage power (wire - shield)  Power frequency withstand voltage power (wire - jacket)  AC withstand voltage power (wire - wire)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature min. (dynamic)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C  300 V  2 kV @ 60 s  2 kV @ 60 s  2 kV @ 60 s  -40 °C  80 °C / 90 °C @ 10000 h Operation -25 °C
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.  AC withstand voltage power (wire - shield)  Power frequency withstand voltage power (wire - jacket)  AC withstand voltage power (wire - wire)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature max. (dynamic)	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C  300 V  2 kV @ 60 s  2 kV @ 60 s  2 kV @ 60 s  -40 °C  80 °C / 90 °C @ 10000 h Operation  -25 °C  80 °C / 90 °C @ 10000 h Operation
Outer diameter tolerance core insulation  Shore hardness wire insulation  Ingredient freeness wire insulation  Amount strands (wire)  Diameter of single wires  Conductor crosssection (wire)  Material conductor wire  Conductor type (wire)  Traversing distance (C-track)  Current load capacity (standard)  Current load capacity min. wire  Electrical resistance line constant wire  Nominal voltage power AC max.  AC withstand voltage power (wire - shield)  Power frequency withstand voltage power (wire - jacket)  AC withstand voltage power (wire - wire)  Min. operating temperature (static)  Max. operating temperature (fixed)  Operating temperature max. (dynamic)  UV resistance	± 5 %  70 ± 5 Shore D  lead-free, cadmium-free, CFC-free, halogen-free, silicone-free  42  0,1 mm  0,34 mm²  Stranded copper wire, bare  strand class 6  5 m @ 25 °C   horizontal  to DIN VDE 0298-4  4,5 A  57 Ω/km @ 20 °C  300 V  2 kV @ 60 s  2 kV @ 60 s  2 kV @ 60 s  -40 °C  80 °C / 90 °C @ 10000 h Operation  -25 °C  80 °C / 90 °C @ 10000 h Operation  DIN EN ISO 4892-2 A



Gasoline resistance	Good, application-related testing
Oil resistance	DIN EN 60811-404   Good, application-related testing
Bending radius (fixed)	5 x Outer diameter
Bending radius (dynamic)	10 x Outer diameter
No. of torsion cycles	2 Mio.
Torsion speed	35 cycles/min
Torsion stress	± 30 °/m